

## INTERNATIONAL COOPERATION TREATY

PCT

## NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Assistant Commissioner for Patents  
United States Patent and Trademark  
Office  
Box PCT  
Washington, D.C. 20231  
ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

Date of mailing:

13 July 2000 (13.07.00)

International application No.:

PCT/JP99/07312

Applicant's or agent's file reference:

09334

International filing date:

24 December 1999 (24.12.99)

Priority date:

28 December 1998 (28.12.98)

Applicant:

HOTTA, Kiyoshi et al

1. The designated Office is hereby notified of its election made:



in the demand filed with the International preliminary Examining Authority on:

17 May 2000 (17.05.00)



in a notice effecting later election filed with the International Bureau on:

2. The election
- ☒
- was



was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland

Facsimile No.: (41-22) 740.14.35

Authorized officer:

J. Zahra

Telephone No.: (41-22) 338.83.38



DOCUMENTS CONSIDERED TO BE RELEVANT							
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)				
X	US 2 287 683 A (HURKA RUDOLPH J) 23 June 1942 (1942-06-23) * page 1, right-hand column, line 27 - line 45 * * page 2, left-hand column, line 41 - line 64 * ---	1,5-10	C01B25/237 C01B25/24				
X	DE 33 27 394 A (BUDENHEIM RUD A OETKER CHEMIE) 14 February 1985 (1985-02-14) * page 6, paragraph 2 * * page 8, paragraph 4 * * claims 1,2 * ---	1-3,5,6					
X	US 4 639 359 A (MICHALSKI DENNIS H ET AL) 27 January 1987 (1987-01-27) * column 1, line 9 - line 13 * * column 3, line 64 - line 68 * * claims 1,3 * ---	1,2					
X	US 3 342 549 A (HIROSHI SHIMIZU ET AL) 19 September 1967 (1967-09-19) * claim 1 * -----	1,5	TECHNICAL FIELDS SEARCHED (Int.Cl.7) C01B				
The supplementary search report has been based on the last set of claims valid and available at the start of the search.							
Place of search MUNICH		Date of completion of the search 16 May 2002	Examiner Harf-Bapin, E				
<table><tr><td>CATEGORY OF CITED DOCUMENTS</td><td>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- &amp; : member of the same patent family, corresponding document</td></tr><tr><td>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</td><td></td></tr></table>				CATEGORY OF CITED DOCUMENTS	T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- & : member of the same patent family, corresponding document	X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document	
CATEGORY OF CITED DOCUMENTS	T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- & : member of the same patent family, corresponding document						
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document							

# ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 99 96 1398

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on  
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

16-05-2002

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 2287683	A	23-06-1942	NONE	
-----				
DE 3327394	A	14-02-1985	DE 3218599 A1	01-12-1983
			DE 3327394 A1	14-02-1985
			AT 20727 T	15-08-1986
			DE 3364504 D1	21-08-1986
			EP 0094630 A1	23-11-1983
			US 4492680 A	08-01-1985
-----				
US 4639359	A	27-01-1987	AU 580244 B2	05-01-1989
			AU 6397886 A	18-06-1987
			BR 8605100 A	21-07-1987
			CA 1261116 A1	26-09-1989
			EP 0227235 A2	01-07-1987
			IN 168682 A1	18-05-1991
			JP 1764949 C	11-06-1993
			JP 4056773 B	09-09-1992
			JP 62171906 A	28-07-1987
			PH 23210 A	06-06-1989
			ZA 8607770 A	27-04-1988
-----				
US 3342549	A	19-09-1967	US 3297401 A	10-01-1967
-----				

Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 09334	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/JP99/07312	International filing date (day/month/year) 24 December 1999 (24.12.99)	Priority date (day/month/year) 28 December 1998 (28.12.98)
International Patent Classification (IPC) or national classification and IPC C01B 25/237		
Applicant TOYO BOSEKI KABUSHIKI KAISHA		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 3 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of \_\_\_\_\_ sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 17 May 2000 (17.05.00)	Date of completion of this report 15 February 2001 (15.02.2001)
Name and mailing address of the IPEA/JP	Authorized officer
Facsimile No.	Telephone No.

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/JP99/07312

## I. Basis of the report

### 1. With regard to the elements of the international application:\*

- ☒ the international application as originally filed
- ☐ the description:  
 pages \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the claims:  
 pages \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, as amended (together with any statement under Article 19  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the drawings:  
 pages \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the sequence listing part of the description:  
 pages \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

### 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

### 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

### 4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/fig \_\_\_\_\_

### 5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/JP99/07312

## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

### 1. Statement

Novelty (N)	Claims		YES
	Claims	1-9	NO
Inventive step (IS)	Claims		YES
	Claims	1-9	NO
Industrial applicability (IA)	Claims	1-9	YES
	Claims		NO

### 2. Citations and explanations

#### Claims 1-6 (No novelty, No inventive step)

Document 1 [US, 5246681, A (Enichem Agricoltura S. P. A.)] cited in the international search report describes bringing phosphoric acid containing impurities into contact with hydrogen bromide as a phosphoric acid purification process (see document 1, Claims, cited in the international search report).

Document 2 [US, 4044108, A (Toyo Soda Manufacturing Co., Ltd.)] cited in the international search report describes bringing phosphoric acid containing impurities into contact with hydrogen bromide as a phosphoric acid purification process. Furthermore, it states that metal impurities such as iron, aluminum and the like are contained in crude phosphoric acid (see document 2, Claims, column 1, lines 11-19; Examples and the like, cited in the international search report).

#### Claims 7-9 (No novelty, No inventive step)

Document 4 [JP, 60-166208, A (Toyo Soda Manufacturing Co., Ltd.)] describes a concentrate of highly pure phosphoric acid (iron content 1 ppm) as a highly pure concentrated phosphoric acid (see document 4, Examples and the like, cited in the international search report).

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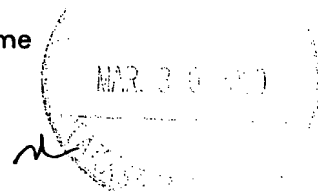
NOTIFICATION CONCERNING  
SUBMISSION OR TRANSMITTAL  
OF PRIORITY DOCUMENT

(PCT Administrative Instructions, Section 411)

From the INTERNATIONAL BUREAU

To:

TAKASHIMA, Hajime  
Yuki Building  
3-9, Hiranomachi 3-chome  
Chuo-ku  
Osaka-shi  
Osaka 541-0046  
JAPON



Date of mailing (day/month/year) 20 March 2000 (20.03.00)	
Applicant's or agent's file reference 09334	<b>IMPORTANT NOTIFICATION</b>
International application No. PCT/JP99/07312	International filing date (day/month/year) 24 December 1999 (24.12.99)
International publication date (day/month/year) Not yet published	Priority date (day/month/year) 28 December 1998 (28.12.98)
Applicant TOYO BOSEKI KABUSHIKI KAISHA et al	

- The applicant is hereby notified of the date of receipt (except where the letters "NR" appear in the right-hand column) by the International Bureau of the priority document(s) relating to the earlier application(s) indicated below. Unless otherwise indicated by an asterisk appearing next to a date of receipt, or by the letters "NR", in the right-hand column, the priority document concerned was submitted or transmitted to the International Bureau in compliance with Rule 17.1(a) or (b).
- This updates and replaces any previously issued notification concerning submission or transmittal of priority documents.
- An asterisk(\*) appearing next to a date of receipt, in the right-hand column, denotes a priority document submitted or transmitted to the International Bureau but not in compliance with Rule 17.1(a) or (b). In such a case, **the attention of the applicant is directed to Rule 17.1(c)** which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.
- The letters "NR" appearing in the right-hand column denote a priority document which was not received by the International Bureau or which the applicant did not request the receiving Office to prepare and transmit to the International Bureau, as provided by Rule 17.1(a) or (b), respectively. In such a case, **the attention of the applicant is directed to Rule 17.1(c)** which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.

<u>Priority date</u>	<u>Priority application No.</u>	<u>Country or regional Office or PCT receiving Office</u>	<u>Date of receipt of priority document</u>
28 Dec 1998 (28.12.98) ✓	10/373696 ✓	JP ✓	17 Marc 2000 (17.03.00)
17 Augu 1999 (17.08.99) ✓	11/230628 ✓	JP ✓	17 Marc 2000 (17.03.00)

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland  Facsimile No. (41-22) 740.14.35	Authorized officer  Taïeb Akremi  Telephone No. (41-22) 338.83.38
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## PCT COOPERATION TREATY

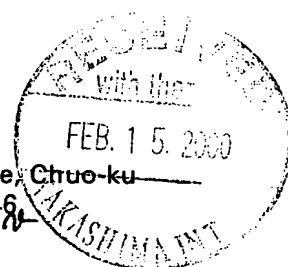
PCT

NOTIFICATION OF RECEIPT OF  
RECORD COPY

(PCT Rule 24.2(a))

From the INTERNATIONAL BUREAU

To:

TAKASHIMA, Hajime  
Yuki Bldg.3-9, Hiranomachi 3-chome, Chuo-ku  
Osaka-shi, Osaka 541-0046  
JAPON

Date of mailing (day/month/year) 24 January 2000 (24.01.00)	IMPORTANT NOTIFICATION
Applicant's or agent's file reference 09334	International application No. PCT/JP99/07312

The applicant is hereby notified that the International Bureau has received the record copy of the international application as detailed below.

Name(s) of the applicant(s) and State(s) for which they are applicants:

TOYO BOSEKI KABUSHIKI KAISHA (for all designated States except US)  
HOTTA, Kiyoshi et al (for US)

International filing date : 24 December 1999 (24.12.99)  
Priority date(s) claimed : 28 December 1998 (28.12.98)  
17 August 1999 (17.08.99)

Date of receipt of the record copy  
by the International Bureau : 14 January 2000 (14.01.00)

List of designated Offices :

EP : AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE  
National : CN, IN, JP, US, ZA

## ATTENTION

The applicant should carefully check the data appearing in this Notification. In case of any discrepancy between these data and the indications in the international application, the applicant should immediately inform the International Bureau.

In addition, the applicant's attention is drawn to the information contained in the Annex, relating to:

- ☒ time limits for entry into the national phase  
☒ confirmation of precautionary designations  
☒ requirements regarding priority documents

A copy of this Notification is being sent to the receiving Office and to the International Searching Authority.

The International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland

Facsimile No. (41-22) 740.14.35

Authorized officer:

Y. KUWAHARA

Telephone No. (41-22) 338.83.38



## PCT COOPERATION TREATY

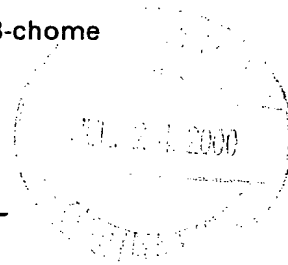
PCT

NOTICE INFORMING THE APPLICANT OF THE  
COMMUNICATION OF THE INTERNATIONAL  
APPLICATION TO THE DESIGNATED OFFICES

(PCT Rule 47.1(c), first sentence)

From the INTERNATIONAL BUREAU

To:

TAKASHIMA, Hajime  
Yuki Building  
3-9, Hiranomachi 3-chome  
Chuo-ku  
Osaka-shi  
Osaka 541-0046  
JAPON

Date of mailing (day/month/year) 13 July 2000 (13.07.00)		
Applicant's or agent's file reference 09334		IMPORTANT NOTICE
International application No. PCT/JP99/07312	International filing date (day/month/year) 24 December 1999 (24.12.99)	
Applicant TOYO BOSEKI KABUSHIKI KAISHA et al		

1. Notice is hereby given that the International Bureau has communicated, as provided in Article 20, the international application to the following designated Offices on the date indicated above as the date of mailing of this Notice:  
CN,JP,US

In accordance with Rule 47.1(c), third sentence, those Offices will accept the present Notice as conclusive evidence that the communication of the international application has duly taken place on the date of mailing indicated above and no copy of the international application is required to be furnished by the applicant to the designated Office(s).

2. The following designated Offices have waived the requirement for such a communication at this time:  
EP,IN,ZA

The communication will be made to those Offices only upon their request. Furthermore, those Offices do not require the applicant to furnish a copy of the international application (Rule 49.1(a-bis)).

3. Enclosed with this Notice is a copy of the international application as published by the International Bureau on 13 July 2000 (13.07.00) under No. WO 00/40507

**REMINDER REGARDING CHAPTER II (Article 31(2)(a) and Rule 54.2)**

If the applicant wishes to postpone entry into the national phase until 30 months (or later in some Offices) from the priority date, a demand for international preliminary examination must be filed with the competent International Preliminary Examining Authority before the expiration of 19 months from the priority date.

It is the applicant's sole responsibility to monitor the 19-month time limit.

Note that only an applicant who is a national or resident of a PCT Contracting State which is bound by Chapter II has the right to file a demand for international preliminary examination.

**REMINDER REGARDING ENTRY INTO THE NATIONAL PHASE (Article 22 or 39(1))**

If the applicant wishes to proceed with the international application in the national phase, he must, within 20 months or 30 months, or later in some Offices, perform the acts referred to therein before each designated or elected Office.

For further important information on the time limits and acts to be performed for entering the national phase, see the Annex to Form PCT/IB/301 (Notification of Receipt of Record Copy) and Volume II of the PCT Applicant's Guide.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. (41-22) 740.14.35	Authorized officer J. Zahra Telephone No. (41-22) 338.83.38
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## PCT COOPERATION TREATY

PCT

INFORMATION CONCERNING ELECTED  
OFFICES NOTIFIED OF THEIR ELECTION

(PCT Rule 61.3)

From the INTERNATIONAL BUREAU

To:

TAKASHIMA, Hajime  
Yuki Building  
3-9, Hiranomachi 3-chome  
Chuo-ku  
Osaka-shi  
Osaka 541-0046  
JAPON

Date of mailing (day/month/year) 13 July 2000 (13.07.00)		
Applicant's or agent's file reference 09334		IMPORTANT INFORMATION
International application No. PCT/JP99/07312	International filing date (day/month/year) 24 December 1999 (24.12.99)	
Applicant TOYO BOSEKI KABUSHIKI KAISHA et al		

1. The applicant is hereby informed that the International Bureau has, according to Article 31(7), notified each of the following Offices of its election:

EP :AT,BE,CH,CY,DE,DK,ES,FI,FR,GB,GR,IE,IT,LU,MC,NL,PT,SE  
National :CN,JP,US

2. The following Offices have waived the requirement for the notification of their election; the notification will be sent to them by the International Bureau only upon their request:

National :IN,ZA

3. The applicant is reminded that he must enter the "national phase" **before the expiration of 30 months from the priority date** before each of the Offices listed above. This must be done by paying the national fee(s) and furnishing, if prescribed, a translation of the international application (Article 39(1)(a)), as well as, where applicable, by furnishing a translation of any annexes of the international preliminary examination report (Article 36(3)(b) and Rule 74.1).

Some offices have fixed time limits expiring later than the above-mentioned time limit. For detailed information about the applicable time limits and the acts to be performed upon entry into the national phase before a particular Office, see Volume II of the PCT Applicant's Guide.

The entry into the European regional phase is postponed until **31 months from the priority date** for all States designated for the purposes of obtaining a European patent.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland  Facsimile No. (41-22) 740.14.35	Authorized officer:  J. Zahra  Telephone No. (41-22) 338.83.38
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<b>0</b>	<b>For receiving Office use only</b>	
<b>0-1</b>	International Application No.	
<b>0-2</b>	International Filing Date	
<b>0-3</b>	Name of receiving Office and "PCT International Application"	
<b>0-4</b>	<b>Form - PCT/RO/101 PCT Request</b>	
<b>0-4-1</b>	Prepared using	<b>PCT-EASY Version 2.91 (updated 01.01.2001)</b>
<b>0-5</b>	<b>Petition</b> The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty	
<b>0-6</b>	<b>Receiving Office (specified by the applicant)</b>	<b>Japanese Patent Office (RO/JP)</b>
<b>0-7</b>	<b>Applicant's or agent's file reference</b>	<b>09334</b>
<b>I</b>	<b>Title of invention</b>	<b>METHOD FOR PURIFICATION OF PHOSPHORIC ACID AND HIGH PURITY POLYPHOSPHORIC ACID</b>
<b>II</b>	<b>Applicant</b>	
<b>II-1</b>	This person is:	<b>applicant only</b>
<b>II-2</b>	Applicant for	<b>all designated States except US</b>
<b>II-4</b>	Name	<b>TOYO BOSEKI KABUSHIKI KAISHA</b>
<b>II-5</b>	Address:	<b>2-8, Dojimahama 2-chome, Kita-ku, Osaka-shi, Osaka 530-0004 Japan</b>
<b>II-6</b>	State of nationality	<b>JP</b>
<b>II-7</b>	State of residence	<b>JP</b>
<b>II-8</b>	Telephone No.	<b>06-6348-3383</b>
<b>II-9</b>	Facsimile No.	<b>06-6348-3393</b>
<b>III-1</b>	<b>Applicant and/or inventor</b>	
<b>III-1-1</b>	This person is:	<b>applicant and inventor</b>
<b>III-1-2</b>	Applicant for	<b>US only</b>
<b>III-1-4</b>	Name (LAST, First)	<b>HOTTA, Kiyoshi</b>
<b>III-1-5</b>	Address:	<b>c/o Toyo Boseki Kabushiki Kaisha, Research Institute, 1-1, Katata 2-chome, Ohtsu-shi, Shiga 520-0292 Japan</b>
<b>III-1-6</b>	State of nationality	<b>JP</b>
<b>III-1-7</b>	State of residence	<b>JP</b>

<b>III-2</b>	<b>Applicant and/or inventor</b>	
III-2-1	This person is:	applicant and inventor
III-2-2	Applicant for	US only
III-2-4	Name (LAST, First)	KUBOTA, Fuyuhiko
III-2-5	Address:	c/o Toyo Boseki Kabushiki Kaisha, Research Institute, 1-1, Katata 2-chome, Ohtsu-shi, Shiga 520-0292 Japan
III-2-6	State of nationality	JP
III-2-7	State of residence	JP
<b>IV-1</b>	<b>Agent or common representative; or address for correspondence</b> The person identified below is hereby/has been appointed to act on behalf of the applicant(s) before the competent International Authorities as:	agent
IV-1-1	Name (LAST, First)	TAKASHIMA, Hajime
IV-1-2	Address:	Yuki Bldg., 3-9, Hiranomachi 3-chome, Chuo-ku, Osaka-shi, Osaka 541-0046 Japan
IV-1-3	Telephone No.	06-6227-1156
IV-1-4	Facsimile No.	06-6227-0260
IV-1-5	e-mail	takatony@mb.infoweb.ne.jp
<b>V</b>	<b>Designation of States</b>	
<b>V-1</b>	Regional Patent (other kinds of protection or treatment, if any, are specified between parentheses after the designation(s) concerned)	EP: AT BE CH&LI CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE and any other State which is a Contracting State of the European Patent Convention and of the PCT
<b>V-2</b>	National Patent (other kinds of protection or treatment, if any, are specified between parentheses after the designation(s) concerned)	CN IN JP US ZA
<b>V-5</b>	<b>Precautionary Designation Statement</b>  In addition to the designations made under items V-1, V-2 and V-3, the applicant also makes under Rule 4.9(b) all designations which would be permitted under the PCT except any designation(s) of the State(s) indicated under item V-6 below. The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time limit.	
<b>V-6</b>	<b>Exclusion(s) from precautionary designations</b>	NONE

<b>VI-1</b>	<b>Priority claim of earlier national application</b>		
VI-1-1	Filing date	28 December 1998 (28.12.1998)	
VI-1-2	Number	373696/1998	
VI-1-3	Country	JP	
<b>VI-2</b>	<b>Priority claim of earlier national application</b>		
VI-2-1	Filing date	17 August 1999 (17.08.1999)	
VI-2-2	Number	230628/1999	
VI-2-3	Country	JP	
<b>VII-1</b>	<b>International Searching Authority Chosen</b>	Japanese Patent Office (JPO) (ISA/JP)	
<b>VIII</b>	<b>Check list</b>	number of sheets	electronic file(s) attached
VIII-1	Request	4	-
VIII-2	Description	13	-
VIII-3	Claims	1	-
VIII-4	Abstract	1	abst09334.txt
VIII-5	Drawings	0	-
VIII-7	TOTAL	19	
	<b>Accompanying items</b>	paper document(s) attached	electronic file(s) attached
VIII-8	Fee calculation sheet	✓	-
VIII-16	PCT-EASY diskette	-	diskette
VIII-17	Other (specified):	Revenue stamps of transmittal fee for receiving office	-
VIII-18	Figure of the drawings which should accompany the abstract		
VIII-19	Language of filing of the international application	Japanese	
<b>IX-1</b>	<b>Signature of applicant or agent</b>		
IX-1-1	Name (LAST, First)	TAKASHIMA, Hajime (Seal)	

## FOR RECEIVING OFFICE USE ONLY

<b>10-1</b>	<b>Date of actual receipt of the purported international application</b>	
<b>10-2</b>	<b>Drawings:</b>	
10-2-1	Received	
10-2-2	Not received	
<b>10-3</b>	<b>Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application</b>	
<b>10-4</b>	<b>Date of timely receipt of the required corrections under PCT Article 11(2)</b>	
<b>10-5</b>	<b>International Searching Authority</b>	ISA/JP
<b>10-6</b>	<b>Transmittal of search copy delayed until search fee is paid</b>	

PCT REQUEST

4/4

09334

FOR INTERNATIONAL BUREAU USE ONLY

11-1	Date of receipt of the record copy by the International Bureau	
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E P



P C T

## 国際調査報告

(法8条、法施行規則第40、41条)  
〔PCT18条、PCT規則43、44〕

出願人又は代理人 の書類記号 09334	今後の手続きについては、国際調査報告の送付通知様式(PCT/ISA/220)及び下記5を参照すること。	
国際出願番号 PCT/JP99/07312	国際出願日 (日.月.年) 24.12.99	優先日 (日.月.年) 28.12.98
出願人(氏名又は名称) 東洋紡績株式会社		

国際調査機関が作成したこの国際調査報告を法施行規則第41条(PCT18条)の規定に従い出願人に送付する。  
この写しは国際事務局にも送付される。

この国際調査報告は、全部で 3 ページである。

☐ この調査報告に引用された先行技術文献の写しも添付されている。

## 1. 国際調査報告の基礎

a. 言語は、下記に示す場合を除くほか、この国際出願がされたものに基づき国際調査を行った。

☐ この国際調査機関に提出された国際出願の翻訳文に基づき国際調査を行った。

b. この国際出願は、ヌクレオチド又はアミノ酸配列を含んでおり、次の配列表に基づき国際調査を行った。

☐ この国際出願に含まれる書面による配列表

☐ この国際出願と共に提出されたフレキシブルディスクによる配列表

☐ 出願後に、この国際調査機関に提出された書面による配列表

☐ 出願後に、この国際調査機関に提出されたフレキシブルディスクによる配列表

☐ 出願後に提出した書面による配列表が出願時における国際出願の開示の範囲を超える事項を含まない旨の陳述書の提出があった。

☐ 書面による配列表に記載した配列とフレキシブルディスクによる配列表に記録した配列が同一である旨の陳述書の提出があった。

2. ☐ 請求の範囲の一部の調査ができない(第I欄参照)。

3. ☐ 発明の単一性が欠如している(第II欄参照)。

4. 発明の名称は ☒ 出願人が提出したものを承認する。

☐ 次に示すように国際調査機関が作成した。

5. 要約は ☒ 出願人が提出したものを承認する。

☐ 第III欄に示されているように、法施行規則第47条(PCT規則38.2(b))の規定により国際調査機関が作成した。出願人は、この国際調査報告の発送の日から1カ月以内にこの国際調査機関に意見を提出することができる。

6. 要約書とともに公表される図は、

第 \_\_\_\_\_ 図とする。 ☐ 出願人が示したとおりである。

☒ なし

☐ 出願人は図を示さなかった。

☐ 本図は発明の特徴を一層よく表している。

A. 発明の属する分野の分類 (国際特許分類 (IPC))  
Int Cl<sup>1</sup> C01B25/237, C01B25/24

B. 調査を行った分野

調査を行った最小限資料 (国際特許分類 (IPC))  
Int Cl<sup>1</sup> C01B25/237, C01B25/24

最小限資料以外の資料で調査を行った分野に含まれるもの

日本国実用新案公報 1926-1996年  
日本国公開実用新案公報 1971-2000年  
日本国登録実用新案公報 1994-2000年  
日本国実用新案登録公報 1996-2000年

国際調査で使用した電子データベース (データベースの名称、調査に使用した用語)  
STN CA POLYPHOSPHORIC?

C. 関連すると認められる文献

引用文献の カテゴリー*	引用文献名 及び一部の箇所が関連するときは、その関連する箇所の表示	関連する 請求の範囲の番号
X	US, 5246681, A (Enichem Agricoltura S. p. A.) 21. 9月. 1993 (21. 09. 93), 特許請求の範囲, 実施例 & JP, 5-213608, A, 特許請求の範囲, 実施例 & EP, 536466, A & DE, 69207542, E	1-6
X	US, 4044108, A (Toyo Soda Manufacturing Co., Ltd) 23. 8月. 1977 (23. 08. 77), 特許請求の範囲, カラム1第11-19行, 実施例 & JP, 52-097394, A, 特許請求の範囲, 第2頁左上欄第11-14行, 実施例 & DE, 2704075, A & GB, 1504480, A	1-6
A	JP, 6-048712, A (三井東圧化学株式会社) 22. 2月. 1994 (22. 02. 94) 特許請求の範囲, 実施例 (ファミリーなし)	1-6

☒ C欄の続きにも文献が列挙されている。

☐ パテントファミリーに関する別紙を参照。

\* 引用文献のカテゴリー

「A」 特に関連のある文献ではなく、一般的技術水準を示すもの  
「E」 国際出願日前の出願または特許であるが、国際出願日以後に公表されたもの  
「L」 優先権主張に疑義を提起する文献又は他の文献の発行日若しくは他の特別な理由を確立するために引用する文献 (理由を付す)  
「O」 口頭による開示、使用、展示等に言及する文献  
「P」 国際出願日前で、かつ優先権の主張の基礎となる出願

の日の後に公表された文献  
「T」 国際出願日又は優先日後に公表された文献であって出願と矛盾するものではなく、発明の原理又は理論の理解のために引用するもの  
「X」 特に関連のある文献であって、当該文献のみで発明の新規性又は進歩性がないと考えられるもの  
「Y」 特に関連のある文献であって、当該文献と他の1以上の文献との、当業者にとって自明である組合せによって進歩性がないと考えられるもの  
「&」 同一パテントファミリー文献

国際調査を完了した日

30. 03. 00

国際調査報告の発送日

11.04.00

国際調査機関の名称及びあて先

日本国特許庁 (ISA/JP)  
郵便番号 100-8915

東京都千代田区霞が関三丁目4番3号

特許庁審査官 (権限のある職員)  
大工原 大二

大工原

4G 9343

電話番号 03-3581-1101 内線 3416



## C (続き) . 関連すると認められる文献

引用文献の カテゴリー*	引用文献名 及び一部の箇所が関連するときは、その関連する箇所の表示	関連する 請求の範囲の番号
X	JP, 60-166208, A (東洋曹達工業株式会社) 29. 8月. 1985 (29. 08. 85) 特 許請求の範囲, 実施例 (ファミリーなし)	7 - 1 0
A	JP, 49-055591, A (エーザイ株式会社) 29. 5月. 1974 (29. 05. 74) 特許 請求の範囲, 実施例 (ファミリーなし)	7 - 1 0

特 許 協 力 条 約

P C T

国際予備審査報告

(法第12条、法施行規則第56条)  
〔PCT36条及びPCT規則70〕

REC'D 02 MAR 2001

PCT

出願人又は代理人 書類記号 09334	今後の手続きについては、国際予備審査報告の送付通知(様式PCT/ IPEA/416)を参照すること。	
国際出願番号 PCT/JP99/07312	国際出願日 (日.月.年) 24.12.99	優先日 (日.月.年) 28.12.98
国際特許分類(IPC) Int Cl <sup>7</sup> C01B25/237		
出願人(氏名又は名称) 東洋紡績株式会社		

1. 国際予備審査機関が作成したこの国際予備審査報告を法施行規則第57条(PCT36条)の規定に従い送付する。
2. この国際予備審査報告は、この表紙を含めて全部で 3 ページからなる。  <input type="checkbox"/> この国際予備審査報告には、附属書類、つまり補正されて、この報告の基礎とされた及び/又はこの国際予備審査機関に対してした訂正を含む明細書、請求の範囲及び/又は図面も添付されている。 (PCT規則70.16及びPCT実施細則第607号参照) この附属書類は、全部で _____ ページである。
3. この国際予備審査報告は、次の内容を含む。  I <input checked="" type="checkbox"/> 国際予備審査報告の基礎 II <input type="checkbox"/> 優先権 III <input type="checkbox"/> 新規性、進歩性又は産業上の利用可能性についての国際予備審査報告の不作成 IV <input type="checkbox"/> 発明の単一性の欠如 V <input checked="" type="checkbox"/> PCT35条(2)に規定する新規性、進歩性又は産業上の利用可能性についての見解、それを裏付けるための文献及び説明 VI <input type="checkbox"/> ある種の引用文献 VII <input type="checkbox"/> 国際出願の不備 VIII <input type="checkbox"/> 国際出願に対する意見

国際予備審査の請求書を受理した日 17.05.00	国際予備審査報告を作成した日 15.02.01	
名称及びあて先 日本国特許庁(IPEA/JP) 郵便番号100-8915 東京都千代田区霞が関三丁目4番3号	特許庁審査官(権限のある職員)  大工原 大二  電話番号 03-3581-1101 内線 3416	4G 9343

様式PCT/IPEA/409(表紙)(1998年7月)

## I. 国際予備審査報告の基礎

1. この国際予備審査報告は下記の出願書類に基づいて作成された。(法第6条(PCT14条)の規定に基づく命令に応答するために提出された差し替え用紙は、この報告書において「出願時」とし、本報告書には添付しない。  
PCT規則70.16, 70.17)

☒ 出願時の国際出願書類

- ☐ 明細書 第 \_\_\_\_\_ ページ、 出願時に提出されたもの  
明細書 第 \_\_\_\_\_ ページ、 国際予備審査の請求書と共に提出されたもの  
明細書 第 \_\_\_\_\_ ページ、 \_\_\_\_\_ 付の書簡と共に提出されたもの
- ☐ 請求の範囲 第 \_\_\_\_\_ 項、 出願時に提出されたもの  
請求の範囲 第 \_\_\_\_\_ 項、 PCT19条の規定に基づき補正されたもの  
請求の範囲 第 \_\_\_\_\_ 項、 国際予備審査の請求書と共に提出されたもの  
請求の範囲 第 \_\_\_\_\_ 項、 \_\_\_\_\_ 付の書簡と共に提出されたもの
- ☐ 図面 第 \_\_\_\_\_ ページ/図、 出願時に提出されたもの  
図面 第 \_\_\_\_\_ ページ/図、 国際予備審査の請求書と共に提出されたもの  
図面 第 \_\_\_\_\_ ページ/図、 \_\_\_\_\_ 付の書簡と共に提出されたもの
- ☐ 明細書の配列表の部分 第 \_\_\_\_\_ ページ、 出願時に提出されたもの  
明細書の配列表の部分 第 \_\_\_\_\_ ページ、 国際予備審査の請求書と共に提出されたもの  
明細書の配列表の部分 第 \_\_\_\_\_ ページ、 \_\_\_\_\_ 付の書簡と共に提出されたもの

2. 上記の出願書類の言語は、下記に示す場合を除くほか、この国際出願の言語である。

上記の書類は、下記の言語である \_\_\_\_\_ 語である。

- ☐ 国際調査のために提出されたPCT規則23.1(b)にいう翻訳文の言語  
☐ PCT規則48.3(b)にいう国際公開の言語  
☐ 国際予備審査のために提出されたPCT規則55.2または55.3にいう翻訳文の言語

3. この国際出願は、ヌクレオチド又はアミノ酸配列を含んでおり、次の配列表に基づき国際予備審査報告を行った。

- ☐ この国際出願に含まれる書面による配列表  
☐ この国際出願と共に提出されたフレキシブルディスクによる配列表  
☐ 出願後に、この国際予備審査(または調査)機関に提出された書面による配列表  
☐ 出願後に、この国際予備審査(または調査)機関に提出されたフレキシブルディスクによる配列表  
☐ 出願後に提出した書面による配列表が出願時における国際出願の開示の範囲を超える事項を含まない旨の陳述書の提出があった  
☐ 書面による配列表に記載した配列とフレキシブルディスクによる配列表に記録した配列が同一である旨の陳述書の提出があった。

4. 補正により、下記の書類が削除された。

- ☐ 明細書 第 \_\_\_\_\_ ページ  
☐ 請求の範囲 第 \_\_\_\_\_ 項  
☐ 図面 図面の第 \_\_\_\_\_ ページ/図

5. ☐ この国際予備審査報告は、補充欄に示したように、補正が出願時における開示の範囲を越えてされたものと認められるので、その補正がされなかったものとして作成した。(PCT規則70.2(c) この補正を含む差し替え用紙は上記1.における判断の際に考慮しなければならず、本報告に添付する。)

## V. 新規性、進歩性又は産業上の利用可能性についての法第12条（PCT35条(2)）に定める見解、それを裏付ける文献及び説明

## 1. 見解

新規性 (N)

請求の範囲

有

請求の範囲

1-9

無

進歩性 (IS)

請求の範囲

有

請求の範囲

1-9

無

産業上の利用可能性 (IA)

請求の範囲

1-9

有

請求の範囲

無

## 2. 文献及び説明 (PCT規則70.7)

請求項1-6について（新規性、進歩性なし）

国際調査報告で引用された文献1：US, 5246681, A (Enichem Agricoltura S. p. A.) には、リン酸の精製方法として、不純物含有リン酸と臭化水素とを接触させる旨記載されている（国際調査で引用された文献1 特許請求の範囲等参照）。

国際調査報告で引用された文献2：US, 4044108, A (Toyo Soda Manufacturing) には、リン酸の精製方法として、不純物含有リン酸と臭化水素とを接触させる旨記載されている。さらに湿式リン酸には鉄・アルミニウム等の不純物金属が含有される旨記載されている（国際調査で引用された文献2 特許請求の範囲、カラム1第11-19行、実施例等参照）。

請求項7-9について（新規性、進歩性なし）

国際調査報告で引用された文献4：JP, 60-166208, A (東洋曹達工業株式会社) には、高純度縮合リン酸として、高純度のリン酸 (Fe 含有量1ppm) を縮合させるものが記載されている（国際調査報告で引用された文献4 実施例等参照）。

## INFORMATION ON TIME LIMITS FOR ENTERING THE NATIONAL PHASE

The applicant is reminded that the "national phase" must be entered before each of the designated Offices indicated in the Notification of Receipt of Record Copy (Form PCT/IB/301) by paying national fees and furnishing translations, as prescribed by the applicable national laws.

The time limit for performing these procedural acts is **20 MONTHS** from the priority date or, for those designated States which the applicant elects in a demand for international preliminary examination or in a later election, **30 MONTHS** from the priority date, provided that the election is made before the expiration of 19 months from the priority date. Some designated (or elected) Offices have fixed time limits which expire even later than 20 or 30 months from the priority date. In other Offices an extension of time or grace period, in some cases upon payment of an additional fee, is available.

In addition to these procedural acts, the applicant may also have to comply with other special requirements applicable in certain Offices. **It is the applicant's responsibility** to ensure that the necessary steps to enter the national phase are taken in a timely fashion. Most designated Offices do not issue reminders to applicants in connection with the entry into the national phase.

**For detailed information about the procedural acts to be performed to enter the national phase before each designated Office, the applicable time limits and possible extensions of time or grace periods, and any other requirements, see the relevant Chapters of Volume II of the PCT Applicant's Guide. Information about the requirements for filing a demand for international preliminary examination is set out in Chapter IX of Volume I of the PCT Applicant's Guide.**

GR and ES became bound by PCT Chapter II on 7 September 1996 and 6 September 1997, respectively, and may, therefore, be elected in a demand or a later election filed on or after 7 September 1996 and 6 September 1997, respectively, regardless of the filing date of the international application. (See second paragraph above.)

Note that only an applicant who is a national or resident of a PCT Contracting State which is bound by Chapter II has the right to file a demand for international preliminary examination.

## CONFIRMATION OF PRECAUTIONARY DESIGNATIONS

This notification lists only specific designations made under Rule 4.9(a) in the request. It is important to check that these designations are correct. Errors in designations can be corrected where precautionary designations have been made under Rule 4.9(b). The applicant is hereby reminded that any precautionary designations may be confirmed according to Rule 4.9(c) before the expiration of 15 months from the priority date. If it is not confirmed, it will automatically be regarded as withdrawn by the applicant. There will be no reminder and no invitation. Confirmation of a designation consists of the filing of a notice specifying the designated State concerned (with an indication of the kind of protection or treatment desired) and the payment of the designation and confirmation fees. Confirmation must reach the receiving Office within the 15-month time limit.

## REQUIREMENTS REGARDING PRIORITY DOCUMENTS

For applicants who have not yet complied with the requirements regarding priority documents, the following is recalled.

Where the priority of an earlier national, regional or international application is claimed, the applicant must submit a copy of the said earlier application, certified by the authority with which it was filed ("the priority document") to the receiving Office (which will transmit it to the International Bureau) or directly to the International Bureau, before the expiration of 16 months from the priority date, provided that any such priority document may still be submitted to the International Bureau before that date of international publication of the international application, in which case that document will be considered to have been received by the International Bureau on the last day of the 16-month time limit (Rule 17.1(a)).

Where the priority document is issued by the receiving Office, the applicant may, instead of submitting the priority document, request the receiving Office to prepare and transmit the priority document to the International Bureau. Such request must be made before the expiration of the 16-month time limit and may be subjected by the receiving Office to the payment of a fee (Rule 17.1(b)).

If the priority document concerned is not submitted to the International Bureau or if the request to the receiving Office to prepare and transmit the priority document has not been made (and the corresponding fee, if any, paid) within the applicable time limit indicated under the preceding paragraphs, any designated State may disregard the priority claim, provided that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity to furnish the priority document within a time limit which is reasonable under the circumstances.

Where several priorities are claimed, the priority date to be considered for the purposes of computing the 16-month time limit is the filing date of the earliest application whose priority is claimed.